

Date: Sat, 27 Mar 93 04:30:11 PST
From: Info-Hams Mailing List and Newsgroup <info-hams@ucsd.edu>
Errors-To: Info-Hams-Errors@UCSD.Edu
Reply-To: Info-Hams@UCSD.Edu
Precedence: Bulk
Subject: Info-Hams Digest V93 #382
To: Info-Hams

Info-Hams Digest Sat, 27 Mar 93 Volume 93 : Issue 382

Today's Topics:

 \$40.00 Radio Shack SWR meter problems (3 msgs)
 20 ma Current loop specs
 Boy, this can turn me off!
 HF operation in Ford Taurus?
 How is 15M Doing Lately?
 Nicad Memory Effect-Fact or Myth? (2 msgs)
 VE1ASJ
 WANTED - special event stations list..

Send Replies or notes for publication to: <Info-Hams@UCSD.Edu>
Send subscription requests to: <Info-Hams-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Info-Hams Digest are available
(by FTP only) from UCSD.Edu in directory "mailarchives/info-hams".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

Date: 26 Mar 93 18:46:30 GMT
From: titan.ksc.nasa.gov!k4dii.ksc.nasa.gov!user@ames.arpa
Subject: \$40.00 Radio Shack SWR meter problems
To: info-hams@ucsd.edu

In article <1993Mar24.203928.2616@mixcom.com>, mei.mon
<mei.mon@mixcom.mixcom.com> wrote:

>
> I recently went to AES here in Milwaukee to by a tiny, hand-held
> 2m/70cm band SWR meter made by Commet. AES had it for around \$70.00.
>
> They were out, so the salesman said Radio Trash had the same one (with
> the RS logo) for only \$40.00. Well they did, so I bought it. However,
> it appears to be WAY OFF.

Kevin-

I found the Radio Shack SWR meter to be inaccurate, compared to my Bird model 43 meter. I opened it up and found an adjustment for power calibration. However, it doesn't compensate for the difference in calibration between different switch settings.

Although the meter leaves something to be desired, I decided that when adjusted for the best compromise in calibration, it is a useful tool for troubleshooting bad antenna systems or bad transmitter outputs. If it says you have a high SWR or very low power output, then you definitely have a problem.

I can't explain how it would say your 5 watt radio had 12 watts output, and have only 1.1 to 1 SWR. If a Bird watt meter showed 12 watts forward and 7 watts reflected, the difference is still 5 watts, but SWR is obviously fairly high. I'd verify both the power and SWR with another meter, before blaming it on the Radio Shack meter.

73, Fred, K4DII

fred-mckenzie@ksc.nasa.gov

Date: 26 Mar 93 20:27:58 GMT
From: ogicse!uwm.edu!zaphod.mps.ohio-state.edu!sdd.hp.com!hpscit.sc.hp.com!hpuerca.atl.hp.com!edh@network.UCSD.EDU
Subject: \$40.00 Radio Shack SWR meter problems
To: info-hams@ucsd.edu

In <1993Mar24.203928.2616@mixcom.com> mei.mon <mei.mon@mixcom.mixcom.com> writes:

>I plugged in my Alinco DJ580T running at 5 watts on 446 MHz and tested
>SWR and power output into my Cushcraft mag-mount mobile. Radio Shack's
>little dream machine said SWR was only 1.1 (okay maybe it IS that good)
>and that power output was 12 Watts! I know for sure that the DJ580 does
>NOT put out 12 watts! Does anyone else out there have experience with this
>thing (or the Commet version)?

>Also, this little wonder has NO calibration pots for SWR! How accurate
>can it be? I thought the procedure was to transmit (while zeroing the meter)
>and then transmit again and read the SWR. This thing just has two switches,
>one for 15 or 50 watts full scale, and another for SWR or POWER.

My RS version has a nice little chart printed on the back that you are supposed to use to adjust the reading you get to the correct (approximate) reading. Readings at low power are difficult

to interpret due to the shape of the curve at that point, but you can get a clue anyway. The meter works just fine for me within the limitations; and the cost is good and the unit handy. I have bulkier units with all the adjustments, etc. for when I believe it more critical. Also, if you measure near the 15 or 50 watt area, it is a moot point and you get a good reading directly.

For general vhf antenna checking, I like to use the MFJ VHF antenna analyzer with a frequency counter. With careful prune N' tune and approach 1:1.1 most all the time.

Cheers & 73 Ed Humphries N5RCK
Hewlet-Packard NARC Atlanta GA
edh@hpuaerca.atl.hp.com

Date: 26 MAR 93 12:26:35
From: pa.dec.com!uvo.dec.com!janix.unt.dec.com!ryn.mro4.dec.com!est.enet.dec.com!
randolph@decwrl.dec.com
Subject: \$40.00 Radio Shack SWR meter problems
To: info-hams@ucsd.edu

In article <1993Mar24.203928.2616@mixcom.com>, mei.mon <mei.mon@mixcom.mixcom.com> writes...

-stuff about power meter calibration deleted-

>Also, this little wonder has NO calibration pots for SWR! How accurate
>can it be? I thought the procedure was to transmit (while zeroing the meter)
>and then transmit again and read the SWR. This thing just has two switches,
>one for 15 or 50 watts full scale, and another for SWR or POWER.

Turn it over and look at the graphs on the back. They let you scale the SWR for the power you're putting in. Simple and cheap.

I dunno about how accurate the power meter is. The single measurement I've made so far, the output of a 1.5W IC2AT into a dummy load, read 1.5W exactly.

-Tom R. N100Q

Date: 26 Mar 93 18:08:05 GMT
From: ogicse!das-news.harvard.edu!cantaloupe.srv.cs.cmu.edu!news@network.UCSD.EDU
Subject: 20 ma Current loop specs
To: info-hams@ucsd.edu

In article <1993Mar25.133938.113@ebc.ee> writes:

> Not a well-defined standard. Usually 17..20mA current in the loop means "space"
> and corresponds to the RS232C "-12V", currents less than 2mA mean "mark" and
> correspond to the "+12V" level of RS232C.

You have "mark" and "space" reversed. Current on and -12 V RS232 correspond to "mark", or logic 1. This is also the idle line state.

Date: 26 MAR 93 12:35:58

From: pa.dec.com!oct17.dfe.dec.com!ryn.mro4.dec.com!est.enet.dec.com!

randolph@decwrl.dec.com

Subject: Boy, this can turn me off!

To: info-hams@ucsd.edu

In article <1993Mar25.161629.8585@nnntp2.cxo.dec.com>, little@nuts2u.enet.dec.com (nuts2u::little) writes...

>Let me add that in 1.5 years of operating (most of it as a simple
>technician class licensee) that I've never once received grief on the air.
>In fact, the only rude thing I've had happen on the air was some guy in
>New York blew me off on making a 2 meter Aurora contact because I couldn't
>copy his call sign at the speed he was sending it. Here in Chicago, I've
>never even heard a single derogatory comment made about technicians on the
>air.

On the other hand, one of the local 2m machines in my area has a jammer. Interestingly, Mr. Jammer seems to jam only new techs on one particular machine. Kind of a turn off for me, I've been listening to this since the license came 2 or 3 weeks ago, and had a couple of QSOs interrupted.

-Tom R. N100Q (tech+, but I guess Mr. Jammer assumes otherwise)

Date: Sat, 27 Mar 1993 00:40:23 GMT

From: elroy.jpl.nasa.gov!sdd.hp.com!hp-cv!hp-pcd!hpspkla!summers@uunet.uu.net

Subject: HF operation in Ford Taurus?

To: info-hams@ucsd.edu

Hi,

I am looking for experiences people have had putting HF rigs (100W) in Ford Tauruses. Specifically have there been any problems with the car's RF susceptibility? Are there any clever antenna mounting schemes? (Specifically for the station wagon.)

I am asking this for another ham that contacted me looking for advice, and since I have never actually followed through with putting a rig in my Taurus I am hoping to find a wealth of knowledge here on the net.

Thanks for any info.

Jim Summers, KD7F
summers@hpspkla.spk.hp.com

Date: Sat, 27 Mar 1993 01:21:03 GMT
From: news.service.uci.edu!unogate!mvb.saic.com!ast.saic.com!
seymour@network.UCSD.EDU
Subject: How is 15M Doing Latelly?
To: info-hams@ucsd.edu

In article <108970001@hpspdla.spd.HP.COM> billg@hpspdla.spd.HP.COM (Bill Gingras) writes:

>
>I'm planning to set up a single band HF antenna. The band I'd like to
>use is 15M as the antenna size will be reasonable. How has 15M been
>doing lately? Has it been open often or am I doing this at the wrong
>time in the sun spot cycle? I realize the band will get worse over the
>next few years, but I want to know how 15M is doing NOW.
>
>Thanks,
>
>- Bill G
>

15 Meters is doing fine these days. It is mostly a daytime band (like 10 Meters). It seems to open up before 10 meters does and close down after 10 Meters.

About 2 or 3 weeks ago, I worked someone in the Ukraine on 15 Meters. (sorry I don't have my logbook at work so I can't remember the callsign)

--
Ken Seymour
seymour@ast.saic.com
KD6PSW/AG

Date: 26 Mar 93 20:06:27 GMT

From: ogicse!news.u.washington.edu!ns1.nodak.edu!plains!altenbur@network.UCSD.EDU
Subject: Nicad Memory Effect-Fact or Myth?
To: info-hams@ucsd.edu

Regarding discharging; would discharging a six cell NiCd pack through a mechanical relay and a power resistor be a good idea?

The relay is rated at 5v and has a operating range of 3.4v on and 9.5v continuous. This would mean that the relay would close a circuit to the resistors as long as the NiCd pack provided at least 3.4v. Below this voltage the relay would open and the pack would stop discharging.

The real question I have is: Does cell reversing occur at 0.57v per cell?

If so, I plan to use a voltage divider so that the relay opens at 1.0v per cell (6v per pack.)

--

Karl R Altenburg altenbur@plains.NoDak.edu
North Dakota State University, Fargo, ND 58105

All things are artificial, for nature is the art of God. SIR THOMAS BROWNE

Date: 26 Mar 93 20:21:30 GMT
From: ucsnews!sol.ctr.columbia.edu!howland.reston.ans.net!zaphod.mps.ohio-state.edu!rphroy!link.ph.gmr.com!vbreault@network.UCSD.EDU
Subject: Nicad Memory Effect-Fact or Myth?
To: info-hams@ucsd.edu

In article <1993Mar26.145513.18679@ke4zv.uucp> gary@ke4zv.uucp (Gary Coffman) writes:

In article <C4GwLt.Fnp@unccsun.uncc.edu> wlhamaty@unccsun.uncc.edu (W Luke Hamaty) writes:

>Gary says that the "wall cube" chargers do not sense the voltage, and so will
>overcharge a battery pack. Does anyone know how smart the ICOM type battery
>packs are about this? I know there is some circuitry built into these things,
>and I am sure that there is a current limit, but do they sense the charge
>level?

Well Gary says that Icom packs use a thermal cutout to manage overcharge. The cells will experience a sharp temperature rise once they've reached full charge. The thermal cutout in the Icom packs will open with this rise, temporarily stopping charging. Their desk chargers can sense this and switch to trickle mode when the thermal cutout cools and closes. The wall cubes cannot. So you get repeated temperature cycling with the wall

cube. On the plus side, the wall cubes supply the 10 hour rate, but on the minus side the thermal cutout requires a respectable temperature rise. So your batteries both overcharge and overheat for fairly long periods when left on the wall cube.

Just to add my own hollow clanging to the discussion...

I opened up the stand-alone slow charger (AD-20 I believe) that I bought to recharge the batteries for my W2A and was surprised at what I found. This is the accessory that slides onto the top of the battery and accepts ~12V DC. I expected to find a regulator chip and a couple of supporting parts. What I found instead is a rather complex circuit board populated by a large number of surface mount components. Hmmm... I didn't feel like tracing the circuit so just closed it up. I wonder though if they put in something to sense voltage depression, or at least latch the high temperature sense. I wonder if the charger that is built into the W2A has the same circuit.

--
Val Breault - N80EF - vbreault@gmr.com \ /|
Instrumentation dept GM NAO R&D Center \ / |
My opinions are not necessarily those of \ /__|
GMR nor of the General Motors Corporation \ / |___

Date: Fri, 26 Mar 1993 19:40:10 GMT
From: pipex!bnr.co.uk!bnrgate!nott!torn!csd.unb.ca!unbham@uunet.uu.net
Subject: VE1ASJ
To: info-hams@ucsd.edu

VE1ASJ was Andy McLellan from Saint John. He is still alive and kicking under a new callsign. Andy's new call is VE1DX (a proper attribute to him). I can reach him anytime on the local repeater. If you have any messages to forward to him, just mail me.

Don Trynor (VE1ARZ)

Date: 26 Mar 1993 13:28 EDT
From: mvb.saic.com!unogate!news.service.uci.edu!usc!howland.reston.ans.net!
usenet.ins.cwru.edu!eagle!venus.lerc.nasa.gov!nmr1248@network.UCSD.EDU
Subject: WANTED - special event stations list..
To: info-hams@ucsd.edu

In article <1993Mar17.102541.1628@csu.edu.au>, conrad@golum.riv.csu.edu.au (Conrad Dare-Edwards) writes...

> Hi,

> Im trying to compile a list of special event stations
> for our local newsletter and would be greatful of some
> pointers or just information on specific stations operating
> after late april.
> Thanks.. Conrad..
>--
>
>Conrad Dare-Edwards E-mail: conrad@silos.riv.csu.edu.au
>Centre for Image Analysis
>Charles Sturt University - Riverina VK2MLQ

QST and Radio Fun magazines have a list of special event stations.
If you can't get a copy of either of these let me know and I'll
email you the special events stations listed for April.

I would be happy to see the list of pointers you received from people
so could you post it to the net when you are done. I have been trying
to make contacts with special events station but so far have
not had any luck, either the time is wrong for me or the bands
are down. :(

73 kc4iyd

Nancy Rabel nmr1248@venus.lerc.nasa.gov
Space Station Freedom --... ..-... . KC4IYD
NASA - Lewis Research Center stamp collector, SF addict

Date: Sat, 27 Mar 1993 01:14:55 GMT
From: news.service.uci.edu!ttinews!harley!paulb@network.UCSD.EDU
To: info-hams@ucsd.edu

References <1993Mar24.203928.2616@mixcom.com>, <C4IJIn.6Go@hpuaerca.atl.hp.com>,
<1p072cINNmj@chnews.intel.com>
Subject : Re: \$40.00 Radio Shack SWR meter problems

In article <1p072cINNmj@chnews.intel.com> jrbromley@joshua.intel.com (James
Bromley~) writes:
+In article <C4IJIn.6Go@hpuaerca.atl.hp.com> edh@hpuaerca.atl.hp.com (Ed Humphries)
writes:
+
+ [mei.mon's quote deleted]
+
+>My RS version has a nice little chart printed on the back that
+>you are supposed to use to adjust the reading you get to the
+>correct (approximate) reading.

+
+>Cheers & 73 Ed Humphries N5RCK
+>Hewlett-Packard NARC Atlanta GA
+>edh@hpuaerca.atl.hp.com
+
+
+What a bunch of wimps! { ;-) satire follows }
+
+***REAL*** hams can calculate SWR from forward and reflected power
+by evaluating the following FORTRAN expression in their heads:
+
+ SWR=(1+SQRT(RPWR/FPWR))/(1-SQRT(RPWR/FPWR))

You mean that I am not a real hams because I do it in my head
using C ????

This mind intentionally left blank

Paul Blumstein, paulb@harley.tti.com, DoD #36, ABATE, AMA, HOG, doh #2
KD6LAA, MARC, ARRL, Platypus #240, QRP-ARPCI, NASWA, LWCA, RCMA (CALA905)
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End of Info-Hams Digest V93 #382
